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10/565,400	01/20/2006	Zev Toledano	06727/0203907-US0	1981
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EXAMINER				
PHAM, KHANH B				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/565,400

**Applicant(s)**

TOLEDANO ET AL.

**Examiner**

Khanh B. Pham

**Art Unit**

2166

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,8,28-31,34-37,67,69,70,74,106,108,113 and 118-123 is/are pending in the application.
- 4a) Of the above claim(s) 34-37,67,69,70,74,120 and 121 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,8,28-31,106,108,118,119,122 and 123 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/9/07
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Group I (Claims 5, 8, 28-31, 106, 108, 118, 119, and 122-123) in the reply filed on 3/18/2009 is acknowledged.

***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 28-31, 5, 8, 118-119 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 28-31, 5, 8, 118-119 recite "a method" which does not meet a specialized, limited meaning to qualify as a patent-eligible process claim. As clarified in *Bilski*, the test for a method claim is whether the claimed method is (1) tied to a particular machine or apparatus, or (2) transforms a particular article to a different state or thing. Since the instant claimed method does not appear to satisfy either requirement, the method is not a "process" within the meaning of 35 U.S.C 101.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 28-31, 8, 106, 108, 118-119, 122-123** are rejected under 35

U.S.C. 102(b) as being anticipated by Brown et al. (US 2001/0047485 A1), hereinafter **"Brown"**.

**As per claim 28**, Brown teaches a method for data access comprising:

- "defining an ontology for application to a set of diverse data sources comprising data" at [0062]-[0067] and Fig. 8;
- "defining data access rights with respect to the ontology" at [0052]-[0058] and Figs. 7-10;
- "controlling user access to the data responsive to the ontology of the data and the access rights applicable thereto" at [0052]-[0058] and Figs. 11-12.

**As per claim 29**, Brown teaches the method of claim 28, wherein

- "defining the ontology comprises specifying a user ontology, and wherein defining the data access rights comprises assigning a classification to a user according to the user ontology" at [0029]-[0045]
- "and wherein controlling the user access comprises comparing the classification to the access rights applicable to the data" at [0052]-[0058].

**As per claim 30**, Brown teaches the method of claim 29, wherein “the diverse data sources are distributed among a set of autonomous organizations comprising at least first and second organizations, and wherein assigning the classification comprises classifying the user according to an organizational affiliation of the user so as to control access by users in the first organization to the data sources held by the second organization” at [0046], [0051].

**As per claim 31**, Brown teaches the method of claim 28, wherein “controlling the user access comprises receiving a query from a user to access the data in the data sources, determining a query plan for responding to the query by selecting one or more of the data sources responsive to the ontology such that the access rights permit the user to access the data in the one or more of the data sources, and generating a response to the query in accordance with the query plan” at [0074]-[0081].

**As per claim 106**, Brown teaches a computer software product, comprising a computer readable medium in which program instruction are stored, which instructions, when read by a computer, cause the computer to

- “receive a definition of an ontology for application to a set of diverse data source comprising data” at [0062]-[0067] and Fig. 8;
- “and a definition of data access rights with respect to the ontology” at [0052]-[0058] and Figs. 7-10;

- “and to control user access to the data responsive to the ontology of the data and the access rights applicable thereto” at [0052]-[0058] and Figs. 11-12.

**As per claim 108**, Brown teaches the product of claim 106, wherein “the diverse data sources are distributed among a set of autonomous organizations comprising at least first and second organizations, and wherein the instructions cause the computer to classify a user according to an organization affiliation of the user so as to control access by users in the first organization to the data sources held by the second organization” at [0046].

**As per claim 118**, Brown teaches the method according to claim 28, and comprising:

- “associating with the ontology one or more logical rules applicable to semantics of the data in the data sources” at [0062];
- “receiving a query from a user regarding the data” at [0075] and Fig. 12;
- “determining a query plan for responding to the query by selecting one or more of the data sources responsively to the ontology and by identifying an operation to be applied to the data responsively to the applicable logical rules” at [0076]-[0078];
- “generating a response to the query in accordance with the query plan” at [0080]-[0081].

**As per claim 8**, Brown teaches the method of claim 118, wherein “the logical rules comprise an access rule, and wherein the query plan comprises selecting at least one of the data sources for use in generating the response responsively to the access rule as applied to the user who submitted the query” at [0076]-[0081].

**As per claim 119**, Brown teaches the method of claim 28, and comprising:

- “collecting information regarding a topology and performance characteristics of the data sources” at [0062]-[0067] and Fig. 8;
- “receiving a query from a user regarding the data” at [0075];
- “determining a query plan responsive to the query and to the information regarding the topology and performance characteristics” at [0076]-[0081];
- “generating a response to the query in accordance with the query plan” at [0079]-[0081].

**As per claim 122**, Brown teaches the product according to claim 106, wherein “the instructions cause the computer to associate with the ontology one or more logical rules applicable to the semantics of the data in the data sources, and further cause the computer, upon receiving a query from a user regarding the data, to determine a query plan for responding to the query by selecting one or more of the data sources responsively to the ontology and by identifying an operation to be applied to the data responsively to the applicable logical rules, and to generate a response to the query in accordance with the query plan” at [0074]-[0081].

**As per claim 123**, Brown teaches the product according to claim 106, wherein

- “the instructions cause the computer to collect information regarding a topology and performance characteristics of the data sources” at [0062]-[0067] and Fig. 8,
- “and further cause the computer, upon receiving a query from a user regarding the data, to determine a query plan responsively to the query and to the information regarding the topology and performance characteristics, and to generate a response to the query in accordance with the query plan” at [0074]-[0081].

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 5** rejected under 35 U.S.C. 103(a) as being unpatentable over **Brown** as applied to claims 28-31, 8, 106, 108, 118-119, 122-123 above, and in view of Shah (“Source Specific Query Rewriting and Query Plan Generation for Merging XML Based Semi-structured Data in Mediation System” Applicant submitted IDS), hereinafter **Shah**.

**As per claim 5**, Brown teaches the method of claim 118 but does not explicitly teach wherein the logical rules comprises a joining rules, and wherein the query plan comprises selecting a key responsive to the joining rules, and joining the data from two or more of the data sources using the key, and wherein selecting the key comprises



analyzing the data so as to select one or more fields in the two or more of the data sources for use as the key so as to provide a desired statistical probability that the data will be joined correctly as claimed. However, Shah teaches a similar method for searching a plurality of data sources utilizing ontology and logical rules, "wherein the logical rules comprises a joining rules, and wherein the query plan comprises selecting a key responsive to the joining rules, and joining the data from two or more of the data sources using the key, and wherein selecting the key comprises analyzing the data so as to select one or more fields in the two or more of the data sources for use as the key so as to provide a desired statistical probability that the data will be joined correctly" at page 58, section 5.4 ("The Join Sequencing Algorithm"). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Shah with Brown's teaching in order to provide correct results from multiple data sources.

### ***Conclusion***

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed

by the Examiner.

In the case of amending the Claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is **(571) 272-3574** for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khanh B. Pham/  
Primary Examiner  
Art Unit 2166

June 1, 2009